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| EXAMINER | |
|---|---|
| VAN HANDEL, MICHAEL P | |
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 09/994,583 | CLEARY ET AL. | |
| | Examiner | Art Unit | |
| | MICHAEL VAN HANDEL | 2424 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *04 December 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1-25,27 and 28* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-25, 27, 28* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

## DETAILED ACTION

### *Response to Amendment*

1. This action is responsive to an Amendment filed 12/04/2008. Claims **1-25**, **27**, **28** are pending. Claims **1**, **2**, **12**, **28** are amended. Claim **26** is canceled.

### *Response to Arguments*

1. Applicant's arguments regarding claims **1**, **2**, **12**, and **28**, filed 12/04/2008, have been fully considered, but they are not persuasive.

Regarding claims **1**, **2**, **12**, and **28**, the applicant argues that Ellis et al. fails to teach or suggest storing dynamically, wherein storing dynamically comprises allocating a portion of memory in the mass storage device, utilizing a predetermined amount of said allocated portion of memory, allocating an additional portion of memory in the mass storage device in response to utilizing said predetermined amount of said allocated portion of memory and repeating said utilizing and said allocating said additional portion of memory until all of said at least one of said plurality of content having a variable duration is stored. Applicant specifically argues that Ellis et al. teaches programs are recorded until the program is finished, but that Ellis et al. is silent as to how the program is recorded until the program is finished. Applicant further specifically argues that Ellis et al. appears to simply reserve an enormous amount of memory to achieve complete recordings. The examiner respectfully disagrees. Ellis et al. discloses that the remote media server may continually prefetch the next 15 minutes of data as needed. A user may start with the first 15 minutes of content. As the user advances toward minute 15, remote media

server checks to see if minutes 15 to 30 are already cached. If they are, the cached copy may be used for the user. If not, the media server may prefetch and pre-decode a suitable amount, so that the video stream for the user is not interrupted. The media server may continually prefetch the next 15 minutes of data (p. 7, paragraph 96). The examiner interprets this to be allocating a portion of memory in the mass storage device, utilizing a predetermined amount of said allocated portion of memory, allocating an additional portion of memory in the mass storage device in response to utilizing said predetermined amount of said allocated portion of memory and repeating said utilizing and said allocating said additional portion of memory until all of said at least one of said plurality of content having a variable duration is stored, as currently claimed.

Further regarding claims **1**, **2**, **12**, and **28**, the applicant argues that Ellis et al. does not teach or suggest the novel way content having variable duration is stored as taught by Applicant's invention. The applicant specifically argues that Ellis et al., at best, appears to teach that a user may select a program that has a defined duration from an interactive programming guide that is recorded until the program ends at the appropriate time. The examiner respectfully disagrees. As noted in the Office Action mailed 1/09/2008, Applicant's specification describes sporting events as content of variable duration (p. 10, lines 20-21 of Applicant's specification). Ellis et al. discloses that a user may record sporting events at the remote media server (p. 3, paragraph 60; p. 10, paragraph 122; p. 13, paragraph 148; & Fig. 18a). As such, the examiner maintains that Ellis et al. teaches storing content of variable duration, as currently claimed. As further noted in the Office Action mailed 1/09/2008, Ellis et al. discloses that a user may be able to cache programs in real-time. A user may indicate a desire to record a program on remote media server 24 by pressing a "PAUSE" key on remote control 40. A record request is then

issued to remote media server 24. Remote media server begins recording the program at this point and until the program is finished or until the user fast-forwards to the end of the cached copy (p. 15, paragraph 165 & p. 19, paragraph 200). The examiner notes that the duration of the content changes over time as more of the content is cached, and that the total recorded duration may depend on whether the user fast-forwards to the end or not. This also meets the limitation of storing content of variable duration, as currently claimed.

Still further regarding claims **1**, **2**, **12**, and **28**, the applicant argues that Ellis et al. disclosure that portions of the program may be deleted during real-time caching teaches away from Applicant's invention, since Applicant's invention stores all of the content having a variable duration. The examiner respectfully disagrees. The examiner notes that arguments that the alleged anticipatory prior art teaches away from the invention are note germane to a rejection under section 102. See **MPEP 2131.05** for details. The examiner further notes that Ellis et al. discloses that portions of the program *may* be deleted during real-time caching (italicized for emphasis), and that the disclosure of Ellis et al. does not require this deletion of program portions.

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims **1-4**, **7-16**, **25**, **27**, **28** are rejected under 35 U.S.C. 102(e) as being anticipated by Ellis et al.

Referring to claim **1**, Ellis et al. discloses a method, comprising:

- receiving audiovisual data from a desired transmission channel (the recorder 125 is a process running on processing circuitry 11 of remote media server 24 and may direct the processing circuitry's one or more tuners to particular channels at particular times. The channels are also received at user television equipment 22 over communication link 20. The processing circuitry 11 is suitable for decoding program files stored on storage 15 and converting them to suitable video signals for distribution by distribution equipment 21)(p. 4, paragraphs 64, 65; p. 5, paragraphs 75, 77; p. 6, paragraph 88; & Figs. 2a-2d);
- if said audiovisual data is not compressed according to a predetermined format, compressing said audiovisual data according to said predetermined format (p. 6, 7, paragraph 89);
- storing dynamically, in a mass storage device and for a predefined period of time, compressed audiovisual data received from said desired transmission channel according to a title plan generated by a time shift scheduler, wherein said title plan includes a plurality of content, wherein at least one of said plurality of content has a variable duration, wherein storing dynamically comprises:
    - allocating a portion of memory in the mass storage device (15 minutes worth of memory)(p. 7, paragraph 96);

- utilizing a predetermined amount of said allocated portion of memory (as a user advances towards minute 15, the next 15 minutes are retrieved and cached)(p. 7, paragraph 96);
- allocating an additional portion of memory in the mass storage device in response to utilizing said predetermined amount of said allocated portion of memory (as a user advances towards minute 15, the next 15 minutes are retrieved and cached)(p. 7, paragraph 96); and
- repeating said utilizing and said allocating said additional portion of memory until all of said at least one of said plurality of content having a variable duration is stored (the next 15 minutes of data is continually prefetched)(Ellis et al. discloses recording sporting events. Ellis et al. also discloses real-time caching a program in response to a "PAUSE" command until the user catches up with the live program. The examiner notes that the duration of this stored content varies until the program is over or the user fast-forwards to the end of the cached copy)(p. 3, paragraph 60; p. 6, paragraphs 83, 85-87; p. 10, paragraph 122; p. 11, paragraphs 125, 126, 133; p. 12, paragraphs 142, 143; p. 13, paragraphs 148, 149; p. 15, paragraph 165; p. 19, paragraph 200; & Figs. 18a, 25a); and

- in response to a user request, providing to said user stored compressed audiovisual data beginning with a portion of said stored compressed audiovisual data having associated with it a first temporal parameter (p. 15, paragraphs 163-166 & Fig. 22).

Referring to claim **2**, Ellis et al. discloses a method in a system adapted to receive broadcast content on a desired transmission channel from each of a plurality of content sources and forward said received broadcast content to a transport network for distribution to subscribers (the recorder 125 is a process running on processing circuitry 11 of remote media server 24 and may direct the processing circuitry's one or more tuners to particular channels at particular times. The channels are also received at user television equipment 22 over communication link 20. The processing circuitry 11 is suitable for decoding program files stored on storage 15 and converting them to suitable video signals for distribution by distribution equipment 21)(p. 4, paragraphs 64, 65; p. 5, paragraphs 75, 77; p. 6, paragraph 88; & Figs. 2a-2d), the method comprising:

- in response to a title plan generated by a time shift scheduler, wherein said title plan includes a plurality of content, wherein at least one of said plurality of content has a variable duration (Ellis et al. discloses recording sporting events. Ellis et al. also discloses real-time caching a program in response to a "PAUSE" command until the user catches up with the live program. The examiner notes that the duration of this stored content varies until the program is over or the user fast-forwards to the end of the cached copy), storing dynamically said broadcast content in a server and associating with said broadcast content a temporal parameter (p. 7, paragraph 97), wherein storing dynamically comprises:
    - allocating a portion of memory in a mass storage device (15 minutes worth of memory)(p. 7, paragraph 96);

- utilizing a predetermined amount of said allocated portion of memory (as a user advances towards minute 15, the next 15 minutes are retrieved and cached)(p. 7, paragraph 96);
- allocating an additional portion of memory in the mass storage device in response to utilizing said predetermined amount of said allocated portion of memory (as a user advances towards minute 15, the next 15 minutes are retrieved and cached)(p. 7, paragraph 96); and
- repeating said utilizing and said allocating said additional portion of memory until all of said at least one of said plurality of content having a variable duration is stored (the next 15 minutes of data is continually prefetched)(p. 3, paragraph 60; p. 6, paragraphs 83, 85-87; p. 10, paragraph 122; p. 11, paragraphs 125, 126, 133; p. 12, paragraphs 142, 143; p. 13, paragraphs 148, 149; p. 15, paragraph 165; p. 19, paragraph 200; & Figs. 18a, 25a);

- forwarding said broadcast content to said transport network for distribution in accordance with said temporal parameter to a requesting subscriber (the examiner notes that the programs can be distributed according to a schedule in an NVOD approach)(p. 2, paragraph 13 & p. 7, paragraph 91); and
- in response to a subscriber request for temporally shifted content associated with said broadcast content, forwarding said stored broadcast content to said transport network for distribution to said requesting subscriber (p. 15, paragraphs 163-166 & Fig. 22).

Referring to claim **3**, Ellis et al. discloses the method of claim 2, further comprising forwarding to said transport network only the received broadcast content presently requested by any subscriber (p. 7, paragraph 91).

Referring to claim **4**, Ellis et al. discloses the method of claim 2, further comprising storing, in said server, broadcast content presently requested by a threshold number of subscribers (p. 6, paragraphs 85, 86).

Referring to claim **7**, Ellis et al. discloses the method of claim 2, wherein said storing of said desired broadcast content comprises storing a version of the desired broadcast content to generate a play track (p. 5, paragraph 74 & p. 7, paragraph 91).

Referring to claim **8**, Ellis et al. discloses the method of claim 2, further comprising, storing selected broadcast content during a predetermined time interval of a broadcast schedule (p. 5, paragraph 76).

Referring to claim **9**, Ellis et al. discloses the method of claim 2, wherein said subscriber request for temporally shifted content is initiated by receiving a subscriber title selection from a time shift interactive programming guide screen (p. 15, paragraphs 162, 163 & Fig. 22).

Referring to claim **10**, Ellis et al. discloses the method of claim 2, wherein said subscriber request for temporally shifted content is initiated by receiving a subscriber title selection from a time shift navigation screen (p. 15, paragraphs 162, 163 & Fig. 22).

Referring to claim **11**, Ellis et al. discloses the method of claim 2, wherein said subscriber request for temporally shifted content is initiated by receiving a pause or rewind subscriber selection while broadcasting of said desired content (p. 17, 18, paragraph 185).

Referring to claims **12** and **28**, Ellis et al. discloses a method/system for providing video information in an interactive information distribution system to a plurality of subscribers, comprising:

- receiving a plurality of scheduled broadcast programs on a desired transmission channel in real-time (the recorder 125 is a process running on processing circuitry 11 of remote media server 24 and may direct the processing circuitry's one or more tuners to particular channels at particular times. The channels are also received at user television equipment 22 over communication link 20. The processing circuitry 11 is suitable for decoding program files stored on storage 15 and converting them to suitable video signals for distribution by distribution equipment 21)(p. 4, paragraphs 64, 65; p. 5, paragraphs 75-77; p. 6, paragraph 88; & Figs. 2a-2d);
- selecting a portion of said broadcast programs according to a title plan generated by a time shift scheduler, wherein said title plan includes a plurality of content, wherein at least one of said plurality of content has a variable duration (Ellis et al. discloses recording sporting events. Ellis et al. also discloses real-time caching a program in response to a "PAUSE" command until the user catches up with the live program. The examiner notes that the duration of this stored content varies until the program is over or the user fast-forwards to the end of the cached copy)(p. 3, paragraph 60; p. 6, paragraphs 83, 85-87; p. 10, paragraph 122; p. 11, paragraphs 125, 126, 133; p. 12, paragraphs 142, 143; p. 13, paragraphs 148, 149; p. 15, paragraph 165; p. 19, paragraph 200; & Figs. 18a, 25a);

- processing said selected broadcast programs into temporally adjusted content, such that the temporally adjusted content is associated with said selected broadcast programs (the examiner notes that by recording content, it can be viewed at a different time than when it was aired. The examiner interprets such content to be temporally adjusted (p. 15, paragraph 166);
- storing dynamically said temporally adjusted content, wherein storing dynamically comprises:
    - allocating a portion of memory in a mass storage device (15 minutes worth of memory)(p. 7, paragraph 96);
    - utilizing a predetermined amount of said allocated portion of memory (as a user advances towards minute 15, the next 15 minutes are retrieved and cached)(p. 7, paragraph 96);
    - allocating an additional portion of memory in the mass storage device in response to utilizing said predetermined amount of said allocated portion of memory (as a user advances towards minute 15, the next 15 minutes are retrieved and cached)(p. 7, paragraph 96); and
    - repeating said utilizing and said allocating said additional portion of memory until all of said at least one of said plurality of content having a variable duration is stored (the next 15 minutes of data is continually prefetched)(p. 10, paragraph 122; p. 11, paragraph 133; p. 15, paragraph 165; p. 19, paragraph 200; & Figs. 18a, 25a);

- broadcasting said plurality of scheduled broadcast programs to said plurality of subscribers via said desired transmission channel (p. 4, paragraph 64 & p. 6, paragraphs 85, 86); and
- in a first mode of operation, associating a temporal parameter to said temporally adjusted content and streaming, on-demand, said temporally adjusted content having said temporal parameter to those subscribers viewing said selected broadcast programs currently being broadcast, such that said subscribers may interactively activate such temporally adjusted content contemporaneously with said currently broadcast programs (p. 15, paragraphs 163-66).

Referring to claim **13**, see the claim objection above. Ellis et al. discloses the method of claim 12, further comprising providing a navigator list (directory) to said subscribers having screens presenting said selected broadcast programs having temporally adjusted content for viewing and selection, wherein in an alternate mode of operation, streaming, on-demand, said temporally adjusted content via said navigator list, such that said subscribers may interactively activate such temporally adjusted content during viewership of previously scheduled broadcast programs selected from said navigator list (p. 13, paragraph 145 & Fig. 18a).

Referring to claim **14**, Ellis et al. discloses the method of claim 13, wherein said subscribers may interactively switch between said first mode and said alternate mode of operation (the examiner notes that the remote media server 24 can perform real-time caching of a program, allowing a user to continue watching later. The user can then catch up to the aired program by fast-forwarding. The user could also switch to a different stored program through the directory listing)(p. 13, paragraph 145; p. 15, paragraphs 165, 166; & Fig. 18a).

Referring to claim **15**, Ellis et al. discloses the method of claim 12, wherein said selecting step comprises:

- monitoring subscriber viewership and selecting those broadcast programs having a viewership exceeding a predetermined metric (p. 6, paragraphs 85, 86 & p. 13, paragraph 148).

Referring to claim **16**, Ellis et al. discloses the method of claim 12, wherein said selecting step further comprises:

- generating title plans for identifying said broadcast programs to be temporally adjusted (p. 15, paragraph 166); and
- defining a temporal availability window for each program (the examiner notes that the remote media server 24 records the program from the position at which the user began recording up to the position of the aired program (p. 15, paragraph 165, 166).

Referring to claim **25**, Ellis et al. discloses the method of claim 12, wherein said first mode of operation further comprises providing an interactive program guide (IPG) to said subscribers having screens presenting said broadcast programs having temporally adjusted content for viewing and selection (p. 13, paragraphs 145-148; & Fig. 18a-d).

Referring to claim **27**, Ellis et al. discloses the method of claim 12, wherein said first mode of operation comprises receiving a temporal control message from a subscriber selected from the group of temporal control messages consisting of pause, rewind, and fast-forward (p. 9, paragraph 111 & p. 15, paragraphs 163, 164).

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims **5**, **6**, **17-21** are rejected under 35 U.S.C. 103(a) as being unpatentable over Ellis et al. in view of Moeller et al.

Referring to claims **5** and **6**, Ellis et al. discloses the method of claim 2. Ellis et al. further discloses allowing a user to pause, stop, rewind, fast-forward, or play a program at a remote media server (p. 15, paragraph 162). Ellis et al. does not specifically disclose that the step of storing comprises storing a temporally sub-sampled version of the desired broadcast content to generate a fast-forward track. Moeller et al. discloses a system that is capable of transferring or playing a normal play stream at any of various indicated positions or locations (col. 6, l. 45-49). The media server stores fast forward and fast reverse streams in association with normal play streams (col. 4, l. 61-65). The fast forward and fast reverse streams have different presentation rates than the normal play stream and are generated from the normal play stream (col. 6, l. 51-59). It would have been obvious to one of ordinary skill in the art at the time that the invention was made to modify the step of storing in Ellis et al. to include storing fast forward and fast reverse streams in association with a normal play stream, such as that taught by Moeller et al. in order to decrease latency time at a video server.

Referring to claim **17**, Ellis et al. discloses the method of claim 16. Ellis et al. does not disclose that the processing step comprises generating real-time encoded play tracks, fast-

forward tracks, rewind tracks, and entry point data (EPD) files associated with each track, said fast-forward and rewind tracks forming said temporally adjusted content. Moeller et al. discloses generating fast forward and fast reverse video streams from a normal play stream (col. 6, l. 55-59) and embedding indexing information within the streams to provide for indexing between the streams (col. 9, l. 10-14 & col. 11, l. 39-41). It would have been obvious to one of ordinary skill in the art at the time that the invention was made to modify the processing step of Ellis et al. to include generating fast forward and fast reverse video streams from a normal play stream and embedding indexing information within the streams to provide for indexing between the streams, such as that taught by Moeller et al. in order to efficiently index to different positions in a video stream in a video delivery system (col. 4, l. 20-23).

Referring to claim **18**, the combination of Ellis et al. and Moeller et al. teaches the method of claim 17. Ellis et al. further discloses encoding the broadcast programs identified in the title plan (p. 6, 7, paragraph 89) and buffering said encoded broadcast programs (p. 6, 7, paragraph 89). Ellis et al. does not disclose that the processing step comprises encoding said broadcast programs to form said temporally adjusted programs. Moeller et al. discloses generating compressed fast forward and fast reverse video streams from a normal play stream (col. 6, l. 55-59). It would have been obvious to one of ordinary skill in the art at the time that the invention was made to modify the processing step of Ellis et al. to include generating compressed fast forward and fast reverse video streams from a normal play stream, such as that taught by Moeller et al. in order to decrease latency time at a video server.

Referring to claim **19**, the combination of Ellis et al. and Moeller et al. teaches the method of claim 18. Ellis et al. does not disclose that the processing step further comprises:

- receiving packetized transport streams from at least one encoder; and
- inserting title identification codes (TICs) to each packet to enable said transport streams to be identified as said real-time encoded play tracks, fast-forward tracks, and rewind tracks.

Moeller et al. discloses generating compressed fast forward and fast reverse video streams from a normal play stream (col. 6, l. 56-59). Moeller et al. further discloses that the encoded stream includes sequence headers that include presentation timestamps and information describing the frame rate and picture size (col. 9, l. 57-62). Moeller et al. further discloses embedding indexing information within the normal play stream and associated trick play streams to provide for indexing between the streams (col. 9, l. 10-14). It would have been obvious to one of ordinary skill in the art at the time that the invention was made to modify the processing step of Ellis et al. to include embedding timestamps, frame rate information, and indexing information within play streams and trick play streams, such as that taught by Moeller et al. in order to decrease latency time at a video server.

Referring to claims **20** and **21**, the combination of Ellis et al. and Moeller et al. teaches the method of claim 19. Ellis et al. does not disclose generating EPD files as fast-forward and rewind tracks are being created. Moeller et al. discloses generating and embedding index information within normal play streams and associated trick play streams to provide for indexing between the streams (col. 9, l. 10-14). It would have been obvious to one of ordinary skill in the art at the time that the invention was made to modify Ellis et al. to include generating and embedding index information within normal play streams and associated trick play streams, such as that taught by Moeller et al. in order to decrease latency time at a video server.

5. Claims **22-24** are rejected under 35 U.S.C. 103(a) as being unpatentable over Ellis et al. in view of Moeller et al. and further in view of Youden et al.

Referring to claim **22**, the combination of Ellis et al. and Moeller et al. teaches the method of claim 19, wherein the storing step includes receiving the buffered encoded broadcast programs (p. 6, 7, paragraphs 89, 90) and storing the real-time play tracks in a plurality of extents (p. 6, paragraphs 82, 83). Neither Ellis et al. nor Moeller et al. disclose that the storing step comprises storing said fast-forward tracks in extents in front to back order and storing said rewind tracks in extents in back to front order. Youden et al. discloses storing selected video data for a FF version in the same order as the original video data is stored and storing the selected video data for the FR version in reverse order to the original version of the video data (col. 4, l. 3-7). It would have been obvious to one of ordinary skill in the art at the time that the invention was made to modify the storing step in the combination of Ellis et al. and Moeller et al. to include storing video data for a FF version in the same order as the original video data is stored and storing the selected video data for the FR version in reverse order to the original version of the video data, such as that taught by Youden et al. in order to decrease latency time at a video server.

Referring to claim **23**, the combination of Ellis et al., Moeller et al., and Youden et al. teaches the method of claim 22, where said storing step further comprises storing selected broadcast programs from a particular channel for a fixed window of time (Ellis et al. p. 6, paragraph 87).

Referring to claim **24**, the combination of Ellis et al., Moeller et al., and Youden et al. teaches the method of claim 22, where said storing step further comprises storing selected broadcast programs from a plurality of channels (Ellis et al. p. 6, paragraph 88).

### *Conclusion*

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MICHAEL VAN HANDEL whose telephone number is (571)272-5968. The examiner can normally be reached on 8:00am-5:30pm Mon.-Fri..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Kelley can be reached on 571-272-7331. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Chris Kelley/
Supervisory Patent Examiner, Art Unit 2424

MVH